

"Clairvoyance"

Digital Camera Binoculars TB-320



User's manual

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1. Introduction

Congratulations on purchasing the Clairvoyance binoculars. That requires no Film and your can take far pictures or short.

- Take Photo& binoculars independently.
- Transfer photos to your PC to edit.
- Shoot up a video.
- Read SD card, using by SD card.(WIN2000/WINXP Do not need drive)
- using by SD card USB disk. (WIN2000/WINXP Do not need drive).
- Serve as camera to the computer.

"Clairvoyance" Features:

• Resolution modes – when 64M SD memory card presented.

High(Hi) for UXGA resolution (1600x1200 pixel) up to 130 pictures.

Low(Lo) for VGA Resolution (640x480pixel) up to 800 pictures.

Video camera mode – up to 600 seconds of streaming video in CIF resolution.

• Self timer for both resolution.

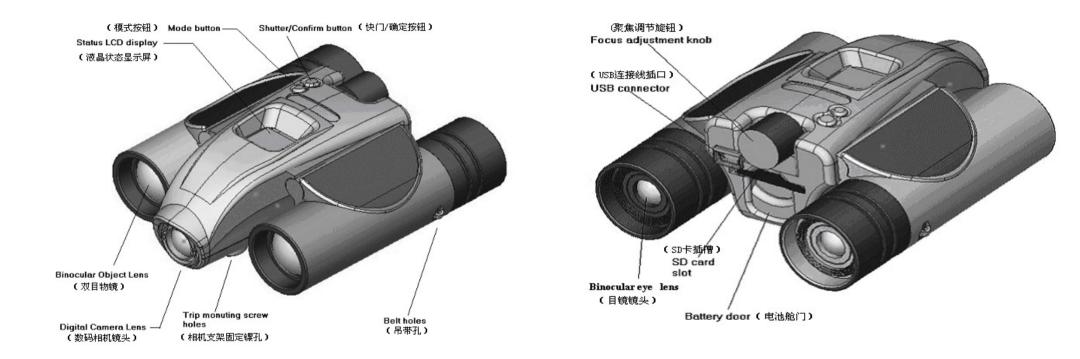
- Fluorescent lighting settings for 50/60Hz 220V.
- 22x16mm status LCD display with Icons.
- Fixed focus 15m to infinity.
- 5Pins Mini USB connector for high speed photo transfer.
- Erase last picture or all pictures and SD card format.
- Auto power off to conserve battery life.
- "Clairvoyance" CD with applications software to edit, manipulate and enhance your pictures and videos.

System Requirements

- Windows 98/Windows ME/Windows 2000/Windows XP.
- P 200MHz (or equivalent) processor of faster
- 64MB SDRAM.
- Video (VGA) card with 2MB of RAM for minimum 16Bit (HIGH color) display.
- CD-ROM Drive.
- An available USB port.
- 600MB of free hard drive space.
- Optional: Windows compatible sound card, microphone and speaker.

If you have questions regarding your system specifications please call your PC manufacturer.

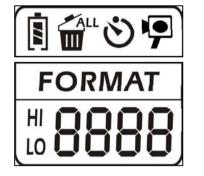
2. Getting know your Clairvoyance



The mode setting operation is a cycle loop .by

pressing Shutter/confirm button each time to enter the next mode sequentially

LCD display:



Below is the description for each lcon on the LCD panel.

Choosing your setting/LCD read out:

1. Self-timer:



Self-timer to delay a short time and then take

a snapshot。

- 2. Hi/Lo quality:
 - **HI** Resolution selection is "LO" for VGA
 - **LO** resolution mode , "HI" for UXGA resolution.



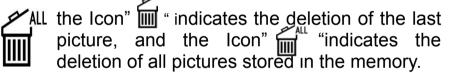
Auto Video impression mode, the frame rate is about 9 fps for all resolution.

4. Battery status detection:

A 3-segments battery icon is displayed to inform users the condition of battery.

5. 50/60:

- **50** for 50Hz electrical power frequency,60 for 60Hz electrical power frequency, Set it according to the country where your are, and the flicker effect on the image will be eliminated.
- 6. Delete last/all:



- 7. Picture number/PC/Memory _ full:
- It will show picture number at "Clairvoyance" LCD, and show the text "PC" while PC is connected. Once memory is full, the text "full" is shown and the alarm sound rises.

3. Software Installation

3. AVI:

Important : Do not connect the "Clairvoyance" to your computer before installing the software from the CD-ROM attached.

Installation the "Clairvoyance" software to your

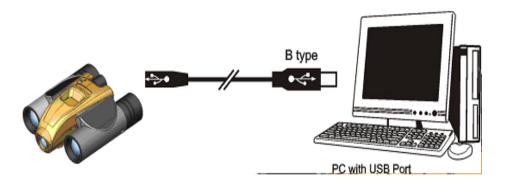
computer:

- 1. Please install the CD-ROM before connecting your **Clairvoyance** computer.
- 2. Insert the **Clairvoyance** CD-ROM into your CD-ROM driver.
- 3. Choose the "install Ulead photo Explorer7.0" button and step through to install the photo editing software included.
- 4. Choose the "Install Camera Driver" button to install the camera driver.
- 5. Choose the "exit" when the software installation has completed the next section.
- 6. Keep the installation CD-ROM inside the CD-ROM drive until you complete the next section.
- Remark: If your installation CD-ROM did not run automatically, please click the "start" button on the windows tool bar and choose "Run", and then browse the CD-ROM drive and run the "setup.exe" file.

Connecting the Clairvoyance to the computer

USB port

- 1. Connect the USB cable(B type) to your computer's USB port as below drawing.
- 2. Connect the USB cable (A TYPE) to your Clairvoyance as below drawing.
- 3. Your computer will automatically recognize the new device.



Using Photo Editing Software:

See the help file of the Ulead phptp Explorer 7.0 Platinum program for detailed usage instructions.

4. Focusing the Binoculars:

- 1. Keep only your left eye open and look through the left lens. Turn the central focus adjustment knot until you see crystal clear image through your left eye.
- 2. Close your left eye and look through your right eye through the right lens. turn the right lens adjustor to focus.
- 3. When done, both your binocular lenses would be in focus.

5. Taking Photos

Battery installation:

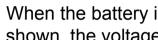
Before using your "Clairvoyance", you need to load the batteries as below:

- 1. Pull down with your thumb on the top of battery compartment.
- 2. Insert2 AAA alkaline batteries into the "Clairvoyance" according to the engraving battery marks.
- 3. Press Power/Mode button about 3 second, the camera will be turned on (Default setting)
- 4. Insert the SD card to SD card slot, if SD card is not presented, a warning tone will sounded 10 seconds then power off automatically.

5. If the SD card is protected, the **PrT** will be shown. Please un-protect the SD card then star to capture.

Battery Status indicator:

The battery status indicator is a three-segments indicator and the meaning is explained briefly below.



When the battery is full, three segments are shown, the voltage is about 3 volts.

- After a period of operation, the voltage drop down After a period of operation, the relation to half, the buzzer sounds a thrilling tone and the left part of the battery icon disappears.
- When the battery is almost exhausted, the battery icon displays only the right part of a short period and the camera will be power off automatically.

Attention: Clairvoyance will be auto power off with a key tone after certain time if not in use and Clairvoyance will be power on by pressing power/mode button with a key tone.

Clairvoyance performs best under good lighting conditions, Please remember that to keep focus 15 meter to infinity to take picture and do not view the sun directly.

Taking still pictures:

- 1. Press the Mode button to choose your camera mode. The default mode is single shot mode which the most commonly used mode.
- 2. Aim at your subject through the binoculars.
- 3. Press the shutter button to capture what you see. A beep sound will confirm that you have taken a photo and the LCD photo counter will increase by one. While capture is start, please hold the "clairvoyance" stably unit sounded again.
- 4. If the camera memory is full, the text "FULL" is shown no the LCD panel and with an alarm sound.

Self Timer – Taking still pictures:

The self – timer allows you to take a picture and have 10 seconds delay before taking a picture.

- 1. Press the mode button until the self timer icon is flashing and then press the Confirm button to enter the self timer mode.
- 2. Press and release the Shutter/Confirm button. The buzzer keeps beeping for 10 seconds before taking a photo.
- 3. You may stop the self timer countdown after is started be pressing the shutter button once.

Taking a video (Only works by SD Memory card)

- 1. Press the Mode button to choose the video mode.
- 2. Press and hold the shutter button to capture video and release the Shutter button only when you wish to end the video capture.
- 3. The video clip is stored in AVI format and the photo counter will increase by one.

Erasing/Deleting Pictures:

As with still pictures, you could have the ability to erase the last or all of your pictures.

Run on PC cam mode:

Press the shutter button while unit is connected with PC until the "PC" show on the status LCD. Now unit is works on the PC cam mode success.

Please Note: When the camera memory is full the LCD will display Full and you cannot take any more pictures by using the EAL – Erase all or E01 –Erase Last Picture option.

Downloading Photos to Your Computer:

When your "**Clairvoyance**" is connected to your computer , you may see a Removable disk drive which is the photo storage of your "**Clairvoyance**" you may simply copy the files from the removable disk to your computer.

Using "Clairvoyance" as USB Disk:

When your "**Clairvoyance**" comes with 12MB of memory built-in for keeping any files you may have. You may increase the storage size by inserting a SD card. Browse to the Removable Disk drive labeled "ICATCH VII" shown inside your computer to copy or delete files in the camera storage.

Clairvoyance is bundled application to let you have more funs with the images on your PC. Also it can be used a web cam, Operation details please refer to the CDROM contents.

Use Clairvoyance as SD memory card:

Digital camera read in common use SD storage card, at" **Clairvoyance** " digital camera read the" **Clairvoyance** "s of you card machine when using, Needn't install drivers under WIN2000/WINXP operating system, but read and write directly.

Use Clairvoyance as PC Cam:

Work as at" **Clairvoyance** " digital camera regard you as, And join USB's cable of digital camera to the mouth of USB's end of computer reliably, the state display screen of liquid crystal shows" PC" printed words at this moment, " install Ulead photo explorer7.0"s start videos, that the operation method of the software please consult " install Ulead photo explorer7.0" detailed user's manual at the help file. Digital camera truss up and have and let you obtain more happy application software" Clairvoyance " from your picture at computer at the same time, Can be regarded as the camera use of the network too. The detailed detail please consult the content in the relevant CD.

6. Maintenance

- Operating Environment: 41 to 104 deg F (5 to 40 deg C). 20-85% relative humidity, non-condensing,
- 2. Special Care taking !!
 - Never immerse the Clairvoyance into any fluid or liquid. Remove dust or stains with a soft cloth dampened with water or neutral detergent. To keep the Clairvoyance in dry and cool dust-free environment or container when it is NOT used.
 - Long time's to take the batteries out, when **Clairvoyance** is NOT to be used over a long period.
 - Please avoid dropping the **Clairvoyance** to hard ground. Do not disassemble the **Clairvoyance**.

7. Specifications

Camera:

- 1. Sensor type: 1/2.7" Color UXGA (1600x1200 pixels) CMOS image sensor.
- 2. Auto exposure and Auto White-balance control.
- 3. Frame rate:

Auto Video impression: 9fps in all resolution.

4. Memory & Images: 128Mbit SDRAM Memory storage.

130+/-20 pictures for HI Resolutions when 64M SD card is presented.

800+/-40 pictures for Lo Resolutions when 64M SD card is presented.

- 5. Battery: AAA1.5V x 2 alkaline batteries.
- 6. Power Consumption:
 - Operation voltage: 3V-AAA battery x 2 Standby current: 150+/-5mA Capture current: 150+/-10mA Sleep mode current: Less then 2 +/-20uA (power off)

With USB connection: No battery consumption

- 7. Focusing Distance: 15 meter min. to Infinity.
- 8. Minimum Luminosity: 300luxs or above
- 9. Operation System environment: WIN 98/ WIN ME/ WIN 2000/ WIN XP

- 10. Interface type: USB1.1
- Storage Condition: -4 to 131 deg F (-20 to 55 deg C). 20-85%R.H., non-condensing.

Binoculars:

- 1. Binocular Magnification: 8x optical
- 2. Binocular Lens Diameter: 22mm
- 3. Angular Field of View: 7degree, 122feet at 1000 yards.
- 4. Exit Pupil: 2.75mm
- 5. Close Focusing Distance: 4.9m

8. Troubleshooting

Display resolution adjustment- You need to set the display resolution to 16 bit color or higher for optimum image display. Refer to the display card manual or below procedure:

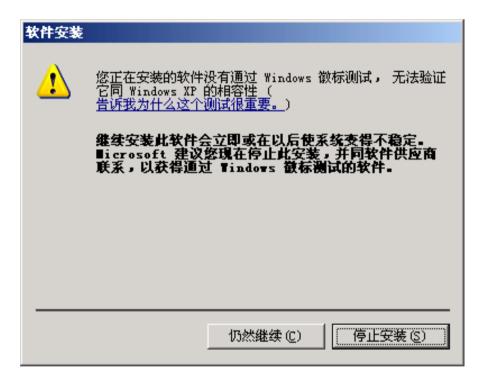
Following is to setting HI Color (16Bit) or above procedure:

- 1. Click the Windows Start button.
- 2. Click Setting and then Control Panel from the pop-up menus.
- 3. Double click the Display icon.
- 4. Click the Setting tab.
- The Color Palette group showing out setting reading. Please select to High Color (16Bit) or True Color (24Bit). Then choose High Color or True Color From the list box.

- 6. Click O.K. If need to do monitor driver, please do it to change the new setting.
- 7. Restart your computer.

9. For Windows XP User Only

This driver of **Clairvoyance** is compatible for Windows XP, But during installation, you, may find the following error message.



Please click 'Continue Anyway' and complete whole installation process.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that my cause undesired operation. Warning: Changes or modification to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and

receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.